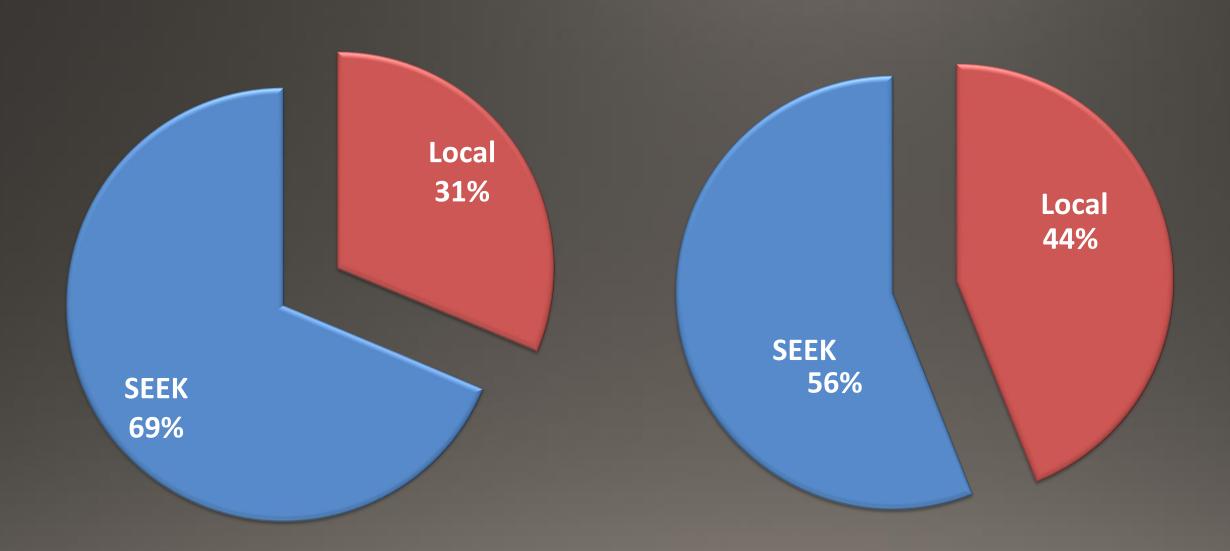
Tim Hockensmith, COO, Nelson County Schools

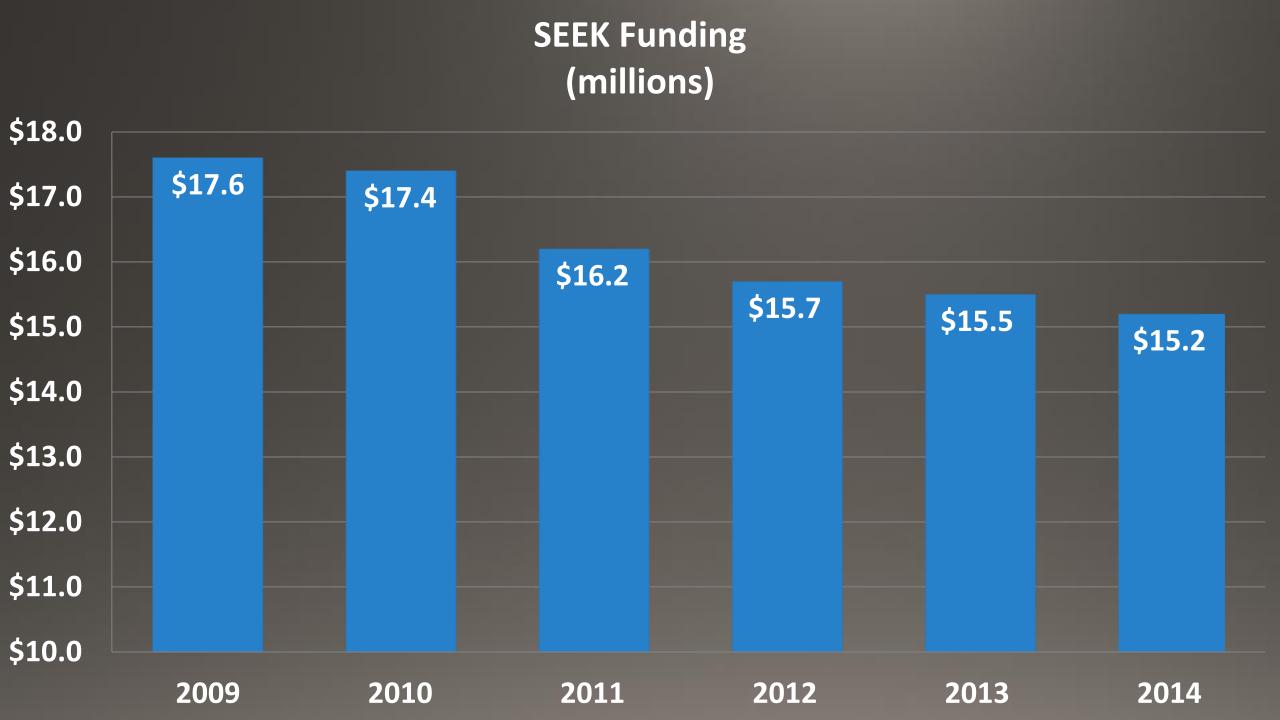
High Performance Renovation on a Budget



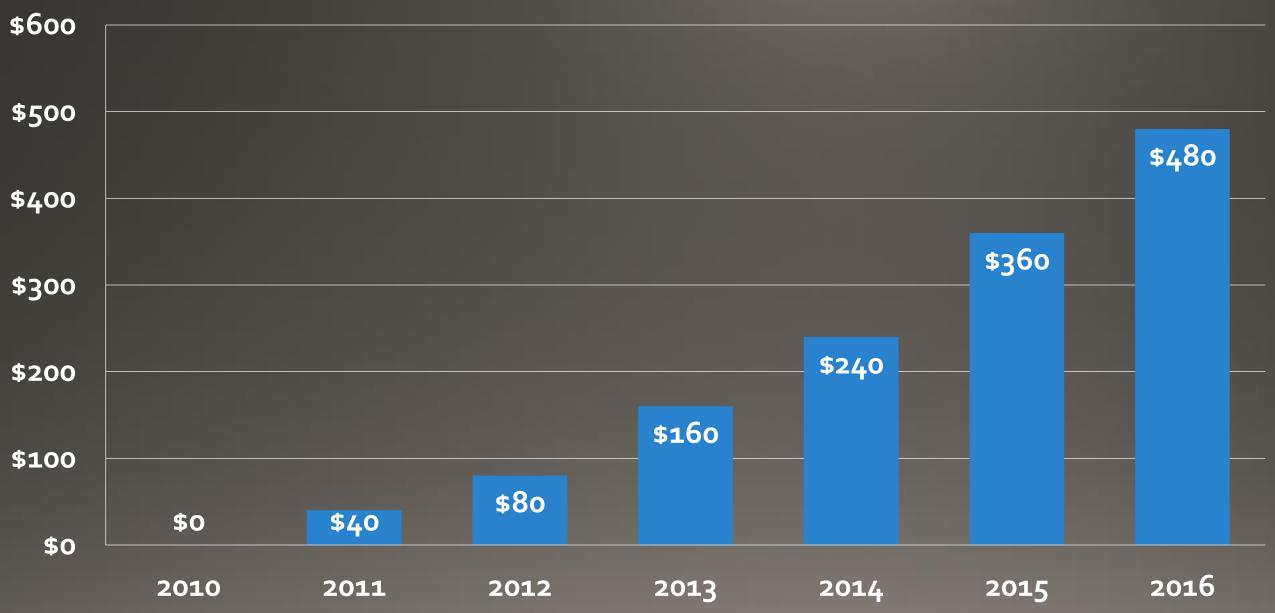
2009 General Fund

2013 General Fund





Certified Retirement Match (Thousands)



ln 2000...

- Four transitional schools
- District wanted to avoid fifth school in category
- Innovative financing through QZAB Bond
- Our first district experience with geothermal HVAC
- Nearing *Energy Star* efficiency data

ln 2001. . .

- Levied first growth nickel
- Allowed construction of two new schools
- Bloomfield Elementary
 - \$113/sq ft
 - Geothermal system
 - Allowed closing of two transitional schools
 - Schools sold as surplus
- Old Kentucky Home MS
 - Geothermal system
 - \$90/sq ft

ln 2005. . .

- Second growth nickel added by school board
- State FSPK match of first growth nickel
- Replaced transitional school at Boston (\$145/sq ft)

On the same nickels...

- Renovated Foster Heights Elementary
 - Energy Star
 - 60 year old building
- Traded Old Kentucky Home Intermediate for ELC expansion space
- Construction of Thomas Nelson High School
 - Energy Star
 - Thought to be most energy efficient HS in the state
- All schools incorporated geothermal systems

ln 2007. . .

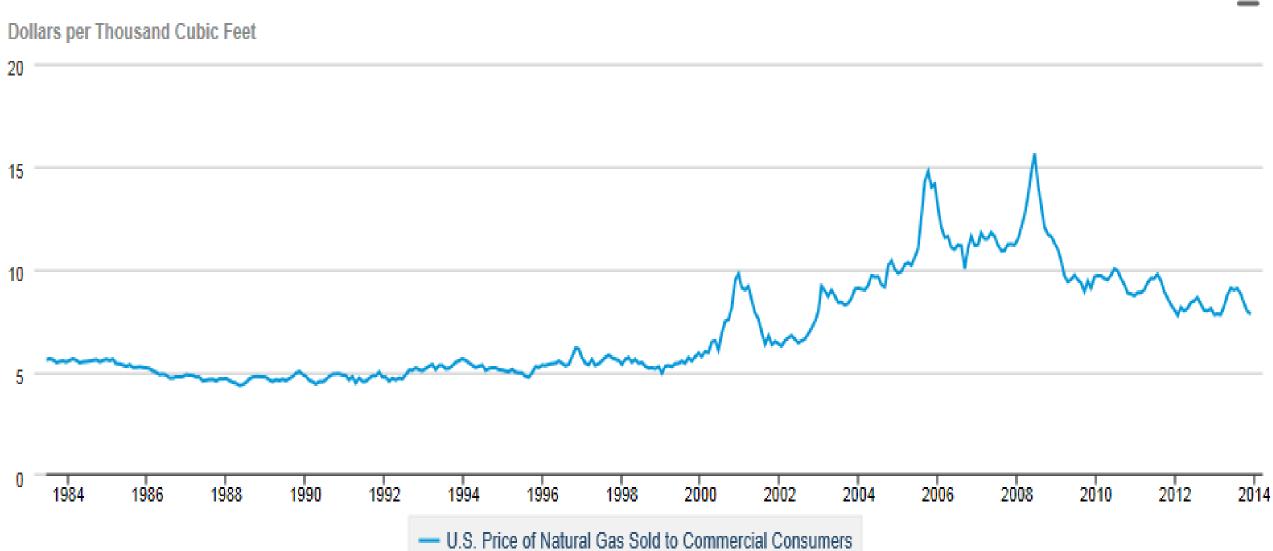
- Contracted with EnergyEd (Cenergistic)
- Hired energy manager
- Total cost avoidance to date \$3.5 million

Benefits of geothermal systems

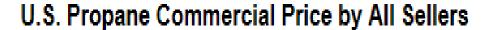
- Little access to natural gas
- Instability of propane market
- Low maintenance
- One type of system to maintain
- BES capacity to absorb BMS geo expansion

U.S. Price of Natural Gas Sold to Commercial Consumers

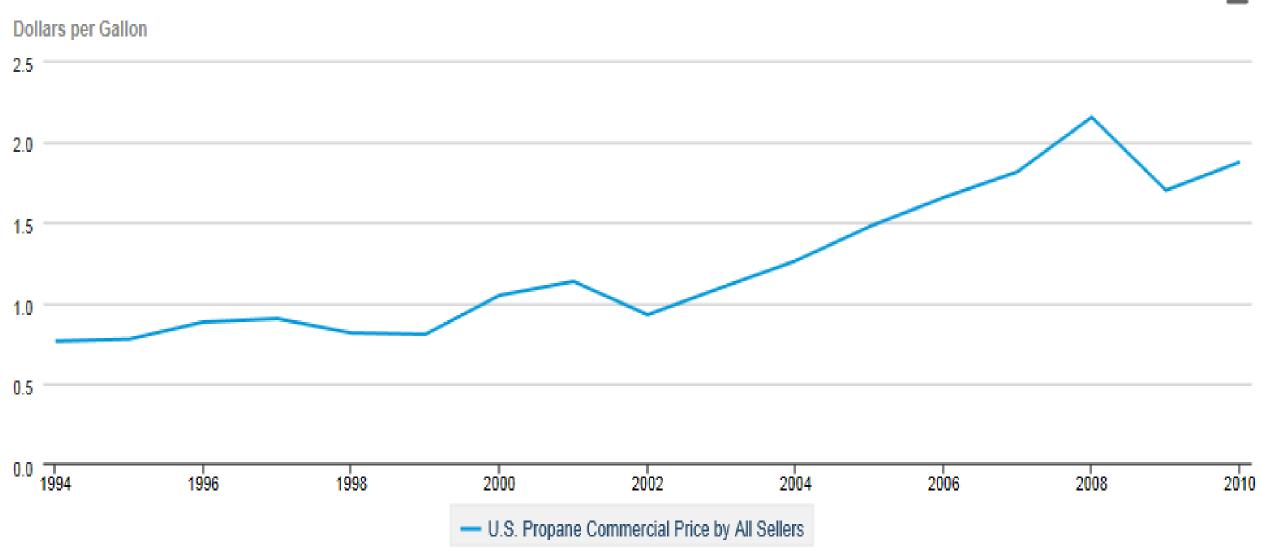














Next steps

- Performance contract
- Cox's Creek Elementary
- Nelson County High School

Persistent people

- Superintendent and school board
- Central office staff
- Energy manager
- Maintenance staff

